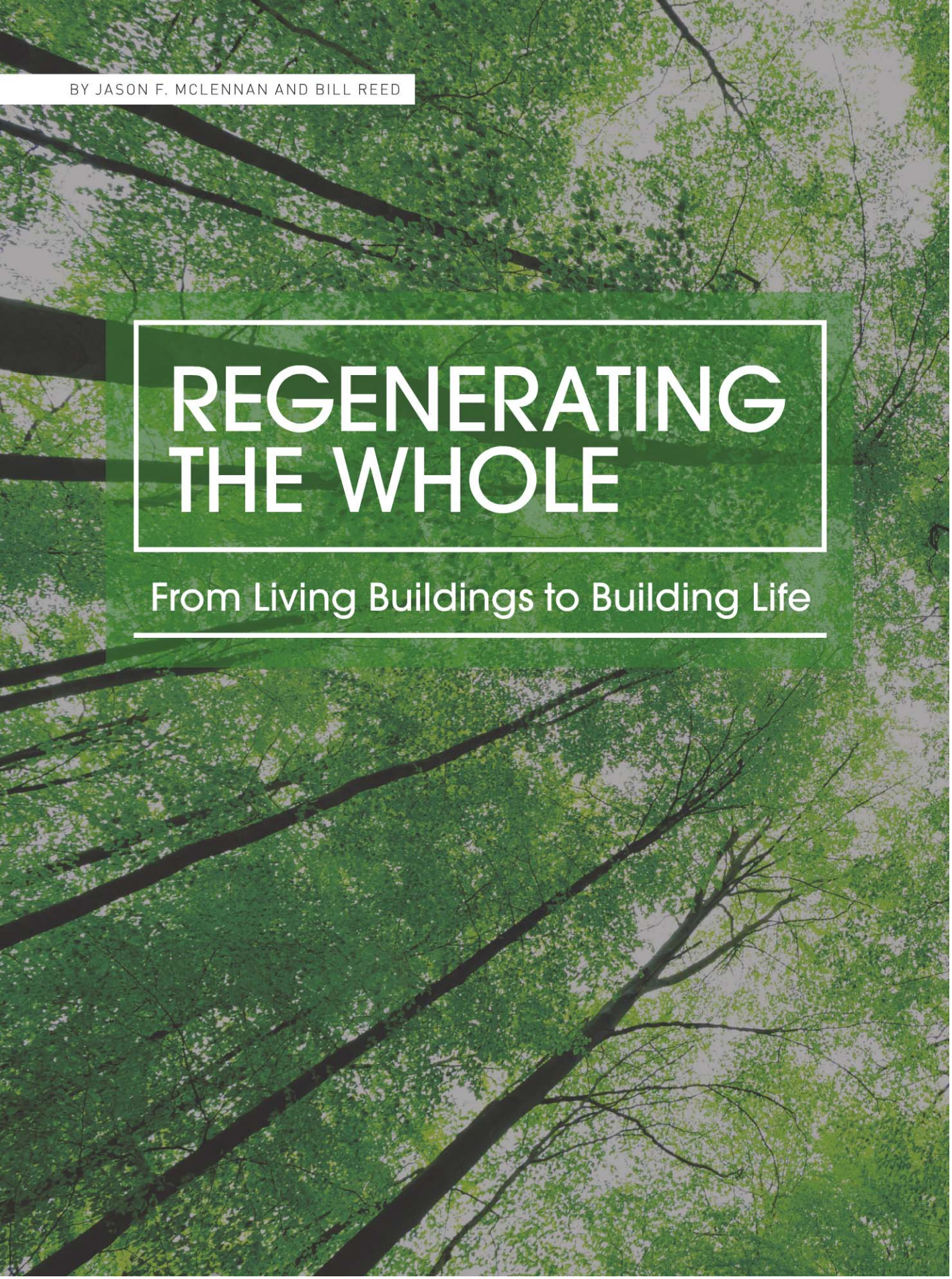
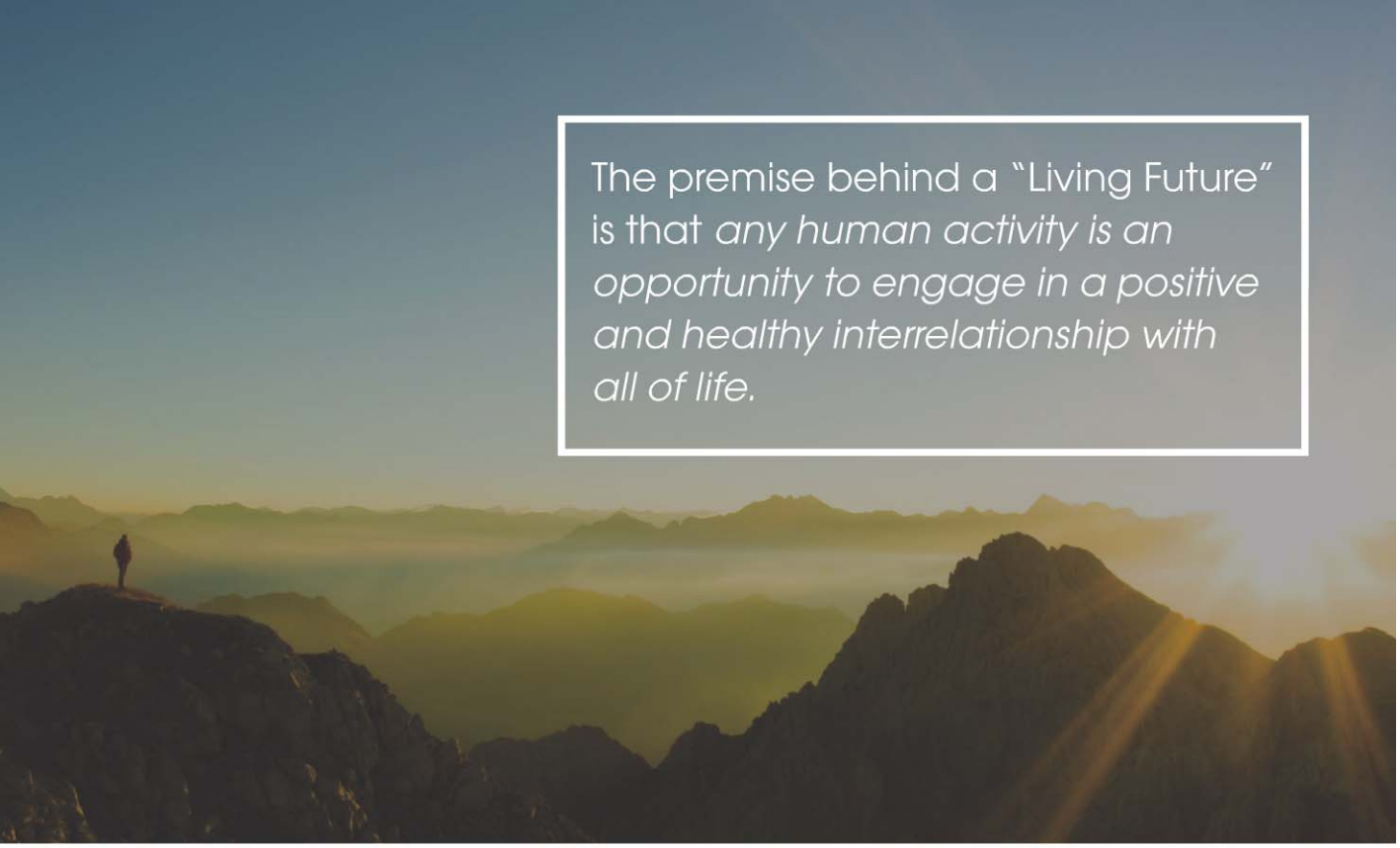


BY JASON F. MCLENNAN AND BILL REED

REGENERATING THE WHOLE

From Living Buildings to Building Life



The premise behind a "Living Future" is that *any human activity is an opportunity to engage in a positive and healthy interrelationship with all of life.*

Life — the whole of life; that is, every entity and system in a reciprocally beneficial and evolutionary relationship — is the top and bottom line of sustainability.

The governing question about sustaining life for humans revolves around the nature of Homo sapiens' role in evolution. Are we meant to be passive observers? Is our role to conserve what is left of nature? Is it our responsibility to reduce the impact of the damage we cause? Or, are we to be positive and active participants for a thriving future?

The premise behind a "Living Future" is that *any human activity is an opportunity to engage in a positive and healthy interrelationship with all of life.*

The work of life is about focusing on active and conscious participation in the evolutionary process. Specifically, this focus means developing life-supporting relationships and actions grounded in each unique ecological system — the places in which we live or act. This work is the missing half of the practice of sustainable design in the building profession. It is essential, yet insufficient, to minimize or neutralize human impact. From a building professional's point of view, it may seem that delving deeply into interacting with life is an over-reach for the job description. We have worked with more than a few green architects who have made this observation:

I really appreciate the work you are doing in bringing back the health of this ecosystem - land, soil, habitat, community, and the like - but what does that have to do with the design of my building?

The general answer: From the perspective of basic building design, *not much.*

It is clear to an increasing number of green building practitioners that making things more efficient and "less bad" is only one aspect of what is required to be in a sustainable relationship with the living systems on the planet. So, then what is the necessary role and purpose for humans in the profound process of evolution?

What is the role of the building professions in leveraging the work of shelter into the world of activating and engaging a conscious and intentional relationship with life? What is required of us and our professional practices in order to become engaged in working with the process of building life as the foundational activity that then informs the nature of the objects such as infrastructure, structured landscapes, and buildings?

The general answer: A range of premises, perspectives, and skills are part of the new palette of practice called Living System Design. We outline the major elements below:

LIVING SYSTEM DESIGN TRUTHS

PRINCIPLE ONE:
Only Life Regenerates

It has become very fashionable to talk about regeneration as if our static designs – our buildings and infrastructure – are regenerative. The words, regeneration and regenerative, are being co-opted, which is particularly painful to see since they are such beautiful words. Buildings should exist only if they allow *life to do what it does.* They either diminish the conditions for life or create a positive framework for engagement and relationships upon which life builds and regenerates. Building design creates the opportunity to engage people and all of life in an ongoing and evolutionary relationship. There are two complementary dimensions to the practice of Regeneration:

- *Regenerative Design* at its entry level is the process for reversing damage and creating the basis for self-renewing resource systems. This dimension is the realm of restoration design practices: restoring the conditions for life to self-organize in ecological subsystems. Narrowing the purpose of regenerative design only to this level -- the threshold work of sustainability -- largely ignores the wider and integrated issues relating to the economy, agriculture, education, culture, and so on. Additionally, this narrow scope is often defined within the boundaries of different professional disciplines rather than viewing these disciplines as parts of an integrated system that includes community engagement and stewardship.

- *Regenerative Development* can be characterized as having two interdependent aspects: 1) a discovery process that determines the right phenomena to work on, or to give form to, in order to inform and provide direction for design solutions that can realize the greatest potential for evolving a system and 2) a continuous developmental process occurring throughout Discovery, Design, and Post-Construction that builds the capability, the field of commitment, and the caring that encourages stakeholders to step forward as co-designers and ongoing stewards of those solutions.[1]

Regenerative Development is an instrument for achieving true sustainability through re-establishing living systems (socio-ecological-conscious systems) with the capacity to continuously evolve. It develops the capacity in people to become more internally and externally capable. It is not an educational process distinct from the work people are doing; instead, development and work are continuously intertwined with one another.[2]

1 Pamela Mang and Bill Reed, Designing from Place, Building Resource & Information, 40:1, 23-38
2 Pamela Mang, Regenesis

PRINCIPLE TWO:
Life is About Interrelationships

Life is viable only through the exchange of energies. Life increases in resilience and evolutionary potential when water, soil, sunlight, energy, living entities, information, and so on have greater opportunities for exchange.

- Diversity of *relationship* is a minimal requirement for life. For example, a zoo has a diversity of species but does not have a diversity of relationships. Therefore, the potential for a healthy ecosystem is limited.
- To be in a positive relationship with nature means we will best serve it when we are developing the skills to become in positive relationships with other humans and, of course, to have a positive relationship within ourselves. Indifference or violence to nature is unlikely to be successfully addressed until we overcome these same things in our own nature.

PRINCIPLE THREE:
Every Place is Unique and Alive and Whole

"Here" . . . is a whole living entity. Systems nested within inter-related systems; just like the human body.

If we use a human being as an example of a whole system, we might assume that our boundary is our skin. That might be a very dangerous assumption for the continuity of our life. The skin, like the boundaries we assume for all living entities, is a boundary that is not a boundary. If our skin were a solid boundary, we would be dead in an instant. If we took way the larger context of air, water, and food we would die. If we took away the healthy soil and farmers who produce the food; we would die. So, where is the boundary? How do we define it?

Bucky Fuller and a group of students were standing outside and talking about systems. He said: the first thing you have to understand to be able to work with systems is that you have to bound them, and he drew a circle in the dirt with his shoe. The second thing you have to know is that boundary is your creation…it doesn't really exist, and he erased the circle with his shoe. [3]

"There is a distinction between environmental and ecological thinking. By definition, an environment is the context within which something exists. Environment contains an "us" and a "not us" in its meaning. Ecology, by contrast, sees all aspects as part of a working dynamic whole – it's all us." [4]

3 As recounted by one of Bucky's students
4 Carol Sanford, *The Responsible Business*, 2011

- The idea of working with a "whole" system is a bit alien to our culture. A whole is not limited by any boundary. Yet it has a domain or limit within which we might practically act depending on the context. "How big is here?" is a question almost anyone can answer about their community or the place they live. Wholes are more easily qualified by the nature of essential relationships. A watershed is one essential relationship of exchange with which we may have some influence. It may be just a half-mile away or it may be down or up river hundreds of miles. "Here" may be defined by the community and include many watersheds. It comes down to what-affects-us and what-we-affect that must first be defined in order to work with living systems. This systemic relationship is known as a holarchy or nested systems. In general, no living thing is more or less important within this system. [5]

- *It is necessary to look at everything as systems or webs of exchange wherein each element is inextricably tied to all of the others. An element is not separable. It also cannot be included randomly. It matters: Who does it shelter? Who does it feed? What does it store? What exchanges does it enable? At what times? And in what ways? It must relate in many directions, not just to me.* [6]

- A thought experiment may be useful to illustrate the difference between designing an object and developing a whole system of interrelationships.

What is the difference in effect and the nature of design if we simply design a bedroom addition or design a bedroom addition for the purpose of developing the best in our children? In the latter example, where is the effective boundary of the systems our children might be engaged in and influenced by? With each changing thought focus the nature of the design quickly begins to change.

PRINCIPLE FOUR:
Working with Whole Systems Requires a Pattern Understanding

Because a whole is greater than the sum of its parts, it is, by definition, impossible to understand a whole using a reductionist perspective. This is where working with pattern understanding comes into play. For practitioners familiar with working with patterns, it is actually easier to assess living patterns and reach definitive conclusions from these distinct patterns than it is to try to make sense of thousands of pieces somehow associated - or not - with each other.[7]

We are quite good at this approach when it comes to assessing a whole person: we intuitively know that we will not be able to understand the distinct nature (or essence) of a friend if there are only a few organs and bones available for inspection. Even if all of his or her component parts were available, including all the genetic sequencing, it is obvious that the nature of the person could then be described only mechanically, if at all. Yet, with observation, we are able to describe the uniqueness of individuals. We do this by looking at the patterns of how individuals, each as a whole entity, are in relation to other entities – friends, colleagues, family members, their community, a dog in the street, and so on. It is how they are in relationship, what value they add to the relationship, the role they serve and provide that begin to triangulate "who" they are, not just "what" they are. The same holds true for the places we inhabit.[8]

Western and Eastern medicine practices may be a useful comparison.

- Green building, as it is currently practiced in a mechanical manner using LEED or other checklists, can be compared to working on the heart, or intestinal system as a specialist might – curing the particular issue but not addressing the overall systemic

5 Also reference, Jason McLennan's article 'Boundaries of Disconnect' Trim Tab, Winter 2013

6 Joel Glanzberg, *Permaculture Mind*, 2013

7 Christopher Alexander's Pattern Language and the Nature of Order series are great resources.

8 Bill Reed, Regenerative Development and Design, from Charles J. Kibert, Sustainable Construction, 3rd Ed, p. 109

nature of the cause, whether it is diet, environment, stress, or genetics.

- Integrative Design, an organized process to find synergies among building and living systems, has an analogy in Integrative Medicine – many specialists getting together to diagnose and address relatively complex cause and effects.

- Regenerative Design might be compared to naturopathic and Eastern Medicine - cranial sacral therapy, acupuncture, and so on – as these practices start with the energetic patterns of the whole body.

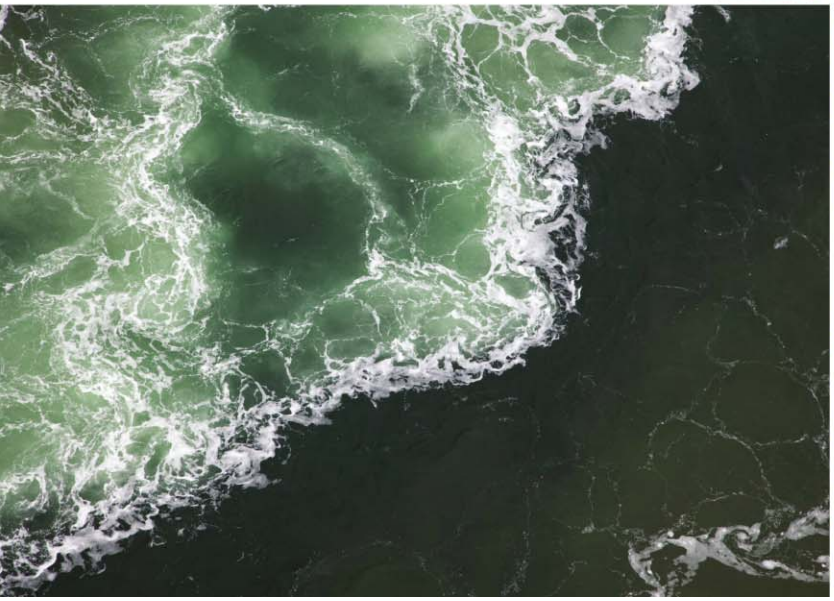
In practice, all of these practice processes should come into play as they all have value. Yet, it is always better to start with the nature of the larger environmental influences and interrelationships before solving for the symptom and cutting the body open.[9]

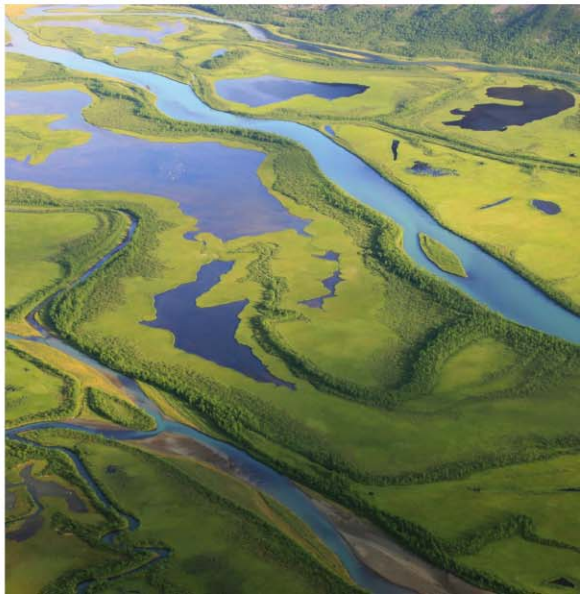
Often, practitioners mistake the "flows" of a system as the indicator of relationship. Flows of water, energy, habitat, and sun are certainly important; yet, continuing to use human relationship as an analogue, we would not describe our relationship to a friend only in terms of flows. The aspects of relationship are energetic, often invisible, and full of extremely complex and nuanced exchanges.[10] There is an essence- to- essence relationship occurring, not an element-to-element relationship.

9 Ibid
10 Ibid

A living system -- or place, or watershed, or community -- is a "being" or "organism". It has a unique essential nature and therefore has a unique way of expressing itself on an evolutionary trajectory. Thus, it is necessary to be in relationship with it; if we are not, then abuse, neglect, or misunderstood interventions are the result. This nature of relationship is the big leap for the design and building industry. Various aboriginal peoples had this understanding; everything in space and time, including the consciousness of "who" they were was inextricably part of the whole.[11]

11 Ibid





The Navajo term for mountain . . . refers to a whole set of relationships and the ongoing movement inherent in those relationships. These relationships include the life cycles of the animals and plants, which grow at different elevations, the weather patterns affected by the mountain, as well as the human's experience of being with the mountain. All of these processes form the dynamic interrelationship and kinetic processes that regenerate and transform life". Since this motion of the mountain is not separate from the entire cosmic process, one can only really come to know the mountain by learning about "the kinetic dynamics of the whole.[12]

All this cautiousness is not to say that working in pieces and parts with quantitative measurement is wrong. It is just not the most productive place to start and never the place to finish. As Wendell Berry observes, *A good solution is good because it is in harmony with those larger patterns . . . A good solution solves more than one problem and it does not make new problems. . . . health as opposed to almost any cure, coherence of pattern as opposed to almost any solution produced piecemeal or in isolation*[13]. Adopting one or two green or regenerative technologies into a green building practice without understanding the underlying principles that make the approach wholly regenerative are not as effective and, at worst, produce unintended counterproductive consequences.

PRINCIPLE FIVE:
We are Nature

This standpoint speaks to a positive role for humans in nature. As long as we see ourselves above nature, or worse than nature, we will not be in "right" relationship. A mutually beneficial, or reciprocal, relationship is required of a healthy living system. A forest tree or wetland is not more or less important than a human. We are integral to each other. The role of humanity might best be described as a "gardener", a relationship that is beneficial for the plants, the soil, the watershed, as well as the person.[14]

The design process provides a unique opportunity to explicitly address the potential for humans and nature to be in mutually beneficial relationship.

12 Mary Jane Zimmerman, Being Nature's Mind: Indigenous Ways of Knowing and Planetary Consciousness

13 Wendell Berry, The Gift of Good Land, Chapter 9, Solving for Pattern

14 Good texts to illustrate this point are 1491, by Charles C. Mann and Tending the Wild, by M. Kat Anderson.

It seems an understatement to say that many issues and new perspectives need to be internalized in the development of our capability to live sustainably.

SO WHAT?

So what do we do with these Living System Design Truths? For our role in nature to be effective and beneficial we need to address some gaps in our understanding and have appropriate expertise represented on our teams in order to truly practice regenerative design. This expertise must include:

- An understanding of ecological system principles and processes.
- Pattern recognition -- or tracking -- skills to identify the distinctiveness of the ecologies (including human culture) in the places we are working. For example, patterns point to the roles that places and people paly in an ecosystem. (Stories have been the way great civilizations have held meaning and development. Stories hold the complexities and essence of life; they hold, and help us to recognize, patterns.)
- Polymaths with an inherent curiosity in all knowledge and a wide enough span of knowledge to know what they do not know.[15]
- Humility to realize that the project's team very best work will still be open to improvement.
- An expert facilitator and resource to work with the client, the team, and the community in developing a regenerative relationship with "place" and to carry that capability forward into the future – forever.

With this understanding it becomes clear that a new purpose and role for the building industry is emerging. The challenge is to move up the ladder of ecological engagement in order to achieve long-term and positive effect with ALL of life. This repositioning requires movement:

- From techniques and technologies applied in isolated fashion to integrated systems as part of a whole.
- To acknowledge the human role as integral to the health of the whole system of life (inhabiting, not occupying).
- To develop the capacity and capability to continually regenerate a new relationship as life emerges - becoming part of life (co-evolving). This aspect requires the development of a mind that looks towards new potential rather than only solving perceived and existing problems with existing tools.

  Evolution is required to sustain all life (including human life). With this imperative, we need to stay actively involved in evolutionary design, realizing the following:

- Sustainability is not possible without engaging in the process of Regeneration or Conscious Evolution.
- Evolution means to bring something of higher order into being, moving up strata to be able to integrate more complex energies to create greater value (ultimately, there can be no net positive without evolution because of entropy).

We need to understand our purpose as humans and our co-evolutionary role in each unique place we live.

This kind of work requires a new way of thinking to shift us from a reductionist worldview. It can not really be adequately described in writing or through dialog because words also tend to fragment us16. This work requires experience – it cannot be abstracted like this article, despite our best efforts to convey the issues. It seems an understatement to say that many issues and new perspectives need to be internalized in the development of our capability to live sustainably. It is not simply shifting to a new mental model; it is, as Daniel Pink points out in his book,17 the development of a Whole New Mind.

15 See Jason's book Zugunruhe – Chapter Three about Polymaths.

16 The Tao Te Ching balances this kind of paradox better than any text when talking about the form and the formless.

17 Insert name of book

The Omega Center for Sustainable Living. Certified under Living Building Challenge 1.3 .

ENGENDERING EXPERIENCE – A TOOL TO TRIGGER A MOVE TO REGENERATION

When the Living Building Challenge was launched in 2006 it was done so in a context where the nature of the discussion around sustainability was limited primarily to LEED points and, by definition, a reductionist approach to limiting negative impact. This approach was a natural beginning for the green building movement, as it started at a level that most building practitioners could understand and were willing to engage – start with the way we do things now – and make it a little less bad.

Yet, it was clear that for true and deep success to take place, a new framework was needed as a bridge to the type of holistic, truly regenerative level of practice. It was not enough to have only have a philosophy or to engage only philosophers. After all, Living Buildings had been discussed by Berkebile and McLennan since the mid-nineties and the Regenesis Group in Santa Fe had been pioneering regenerative thinking for at least as long, with minimal uptake. Others, like Sim Van Der Ryn and Pliny Fisk had been advocating ecological design even longer and Buckminster Fuller and Ian McHarg who preceded these individuals, were two of the earliest proponents. Making such a large conceptual jump within practical parameters was and is highly challenging.

A tool that looked just enough like LEED on the surface was required for people to be willing to engage, *but written and codified in such a way that working with it required confronting the very challenges inherent in a reductionist approach.* The Living Building Challenge in many ways is a paradox – a reductionist tool to dismantle reductionist approaches, or as Nadav Malin of Environmental Building News observed, "a manifesto in disguise as a standard."[18]

It was a stealthy way to wean people from one intellectual framework into another. The creation of the Living Building Challenge by McLennan was very deliberate and it has been remarkably successful at getting people from many backgrounds all over the world to begin asking the right questions about our place in the world and what true success with our architecture and communities should look like. It informs us of how to

18 Cite article

The Challenge is successful because it satisfies our left-brain craving for order and thresholds and our right-brain intuition that the focus needs to be on our relationship and understanding of the whole of life.

change the standard and associated programs – all the while we are aware that any "tool" created by us or anyone else will always have limitations.

The Challenge is successful because it satisfies our left-brain craving for order and thresholds and our right-brain intuition that the focus needs to be on our relationship and understanding of the whole of life.

The first Living Buildings become living proof that we can go much further than we thought with today's technologies and know-how while shining bright lights on how far even the best Living Building is from our ultimate destination. When truly successful, we will see the light shining right back at us – it is *we* who have needed to change all along! More than seeing a new certified Living Building, we are most encouraged when the program stimulates that electric moment when individuals understand their connection to the whole and the lights go on. It does not happen all the time but it is beginning to happen with increasing frequency.

This is where Regenerative Development comes into practice. As Kathia Laszlo observes, "Sustainability is an inside job." A new way of purposeful relationship and "being"in the world requires a continual process of conscious engagement - a "practice"if you will. Engaging with life in a co-evolutionary (developmental) way requires us to substantially change how we think about life, our role in it, and how we continually engage with evolutionary emergence. This is the "other half" of sustainability.

Photo Caption: Living Building Challenge 2.1

This article is intended to serve as a bridge between two schools of thought that are now converging in an interesting way. The convergence of improving the ef-

Moving from Living Buildings as a "noun" to that of a "verb" and by putting greater emphasis on regenerative development than can lead to a Living Future is a true convergence of two powerful schools of thought.

ficiency of our technical practices and embracing the effectiveness of working and "becoming" with whole living entities and systems is the ecology we are working towards. The Living Building Challenge symbolizes this convergence. It points the direction towards the verb "living", towards "aliveness."

This shift is exciting and full of meaning and potential. This is where Living Buildings converges with the regeneration of a whole living system of mutually supportive interrelationships that is informing the 3.0 version of the Challenge which will be released sometime in 2014.

The living system school of thought represented by Regenesis starts with the understanding (and awe) that healthy living systems have an inherent capacity to continually generate new sources of life for and within themselves and their environment – that is,to re-generate. For human development to be a positive force, the imperative is to enable the system(s) it affects to re- establish its regenerative capacity. The most effective means for doing so is through using the way a project is conceived, designed, constructed, and occupied to create a new living system - one that harmonizes project and place at a new order of regenerative capacity. To develop this capability within humans to engage the necessary and ongoing mutually beneficial relationship with life, the people in that place are challenged to develop the capacity for new understanding and care in order to participate with the ongoing evolutionary processes.

The practice process of regeneration emerged from the work of Charles Krone.[19] It is a school of thinking and being - to see and be one with the working of life as a system of nested and inseparable whole living entities. It takes time and purposeful practice to shift from only seeing the world as separate, machine-like things that are mechanically connected to one another.

The challenge will be to understand that working with aliveness and the development of the consciousness that can hold and evolve with the continual process of emergence is markedly different than working with a mechanical and reductionist worldview. All are necessary and yet require truly different mindsets. Remember that Einstein said, "We can't solve problems by using the same kind of thinking we used when we created them."

Moving from Living Buildings as a "noun" to that of a "verb" and by putting greater emphasis on regenerative development than can lead to a Living Future is a true convergence of two powerful schools of thought.

19 Pamela Mang and Bill Reed, Designing from Place, Building Resource & Information, 40:1, 23-38

JASON F. MCLENNAN is the CEO of the International Living Future Institute. He is the creator of the Living Building Challenge, as well as the author of five books, including his latest: *Transformational Thought.*

BILL REED is a partner at Regenesis and a renowned pioneer in the fields of Integrative Process and Regenerative Development. He is the author of many articles, and co-author of, *The Integrative Design Guide to Green Building.*

NATURE'S ESSENCE

BY SAM WILLIAMS

I'm not my social condition.
I'm the manifestation of Nature's Essence.
For humans and nature to be in relationship.
We must always be present.

Patterns and tracks left on the land.
Can help to explain the nature of place and its story.
But we must never be misled,
by the worldly tracks of economic glory.

Full development of oneself is key.
We must grow at every stage and station.
If we're transformed by natural cycles,
we're a part of nature's regeneration.

Living System frameworks and principles,
are only useful if we are not faking.
If we are not true to our inner selves,
we'll be stuck in states of falsification

Seeing the whole picture is much believable,
but its only part of the true reality
To take nature's essence to the next level,
we need regeneration and sustainability.

We will never heal the earth,
if we continue at the pace we're going.
We must shift and break mental paradigms,
so that we are truly growing.

A personal legacy is a earthly deposit.
It's a physical statement of our human presence.
If we reside by Living System practices.
We are living by nature's essence.

SAMUEL WILLIAMS a native Bostonian, graduated from Boston University and has had an exemplary career in the Human Service field for over 15 years. Prior to obtaining the Chief Operating Officer position with the UUUM, he held leadership positions with both City Year Boston and Youth Opportunity Boston, serving the Boston community in a variety of ways.

BY HILARY MAYHEW

Stop, Collaborate & Listen

Everyday, I have the opportunity to see the difference the International Living Future Institute's Ambassador Network is making in our world. We have over two hundred and fifty volunteers spreading the concepts of the Living Building Challenge across five continents. Our Ambassadors help broaden the Institute's base of knowledge, connections and support. The Challenge is not only a building certification system but also a philosophy and advocacy tool, and the Ambassador Network is the best example of these robust layers within the Living Building Challenge.

So what is an Ambassador? The Ambassador Network is made up of volunteers in either of two roles: Presenters and Facilitators. Presenters create interest and increase knowledge while moving forward the policy and advocacy goals of the Living Building Challenge. They are trained to give presentations to architecture firms, design schools, urban planners - anyone wanting to learn more about sustainability turned on its head.

Facilitators create communities of Living Building Challenge enthusiasts called Collaboratives. Collaboratives provide an opportunity for individuals to come together for informal learning experiences and to advance community transformation. Collaborative participants' activities support creation of the local conditions that allow for the development of Living Building projects. Collaboratives are sprouting up in many cities throughout the world and one in the Mid-West region of the U.S. is quickly gaining ground.

The Living Building Challenge Collaborative: Chicago hit the ground running from the moment it began just two short years ago. They are currently hosting a design competition and have reached over 150 people in their region with the Institute's message of creating a world that is socially just, culturally rich, and ecologically restorative.

TAKING ROOT:

The Chicago Collaborative grew organically beginning with people interested in learning more about the Challenge. "Around 2010 we started to hear directly from a few of our clients their interest to deliver projects that complied with the Living Building Challenge Red List." says Bob Webber, Senior Project Manager at Valerio Dewalt Train Associates on his first introduction to the Living Building Challenge. After attending his first Living Future unConference in 2011, Webber quickly joined the Ambassador Network. He then joined forces with Brian Dolan, a sustainability and design technician with HOK. Brian has been an Ambassador since 2010 and was already rooted in Chicago, laying the groundwork for the Collaborative.

Across the country, in Portland, Oregon, active Cascadia Green Building Council member, Karin Miller had watched the Challenge grow from its infancy. After leaving Portland to achieve her Masters in Architecture in Italy, Miller moved to Chicago and began working for YR&G Sustainability. She reconnected with the Challenge and reached out to Weber to join the Collaborative.

"[In Chicago] we were riding a wave that we were not at the forefront of anymore," says Miller. Chicago touts itself as one of the greenest cities in the country with 106.8 million sq ft of LEED certified space. The Collaborative saw this as an opportunity to push the envelope, bring the Challenge to the table and start a dialogue with local design professionals. The three leaders dove deeper into the

The Chicago Collaborative hosting the Near West Side Design Competition meeting.

Challenge by working through each Petal. Through their examination of the seven petals, barriers to having a Living Building in their city came to light. The energy and water petal created a plethora of research opportunities and public interest. They wanted to make headway in the building market but were faced with the reality of capacity issues. They needed help so they got creative and decided to launch a design competition to tap into the local expertise.

Enter the Near West Side Design competition. The Chicago Collaborative wanted to bring like-minded organizations together with local design students to polish their design skills and complete the necessary research. The goal of the competition was to inspire, inform and encourage the development of a Living Building in Chicago while identifying barriers within the city's building codes. The format of the competition is unique in that the Chicago Collaborative is hosting meetings every four weeks during the design competition. These meetings will serve as an opportunity for the competition project teams to present their ideas to collaborative members and gain valuable feedback.

On paper, the Near West Side of Chicago has everything a thriving neighborhood needs; public transportation, parks, a hospital, and much more, but it also has a disjointed feel. "The competition site is representative of an 'in-between' space in the city of Chicago: it is in-between already established local destinations such as The United Center and the Malcom X City College, and to a larger extent, in-between downtown Chicago and the outer city." Says Webber. This type of leftover space is common in Chicago, a city defined by its neighborhoods, and successful development of this site that is guided by Living Building principles could be used as a template for other Chicago neighborhoods in the future.

The main feature of the larger neighborhood is marked by the Eisenhower Expressway (I-290), which bisects the neighborhood. New growth should link these eco-

"By looking to our native ecosystems as a benchmark to measure the performance of our developments, we can begin to create buildings, infrastructure, and cities that perform as well if not better than the ecosystems that they inhabit, or many times replace."

—COFFMAN PHILLIPS

nomic centers in a way that builds an urban identity and draws in new population and business. "We are seeking design solutions where the site becomes a destination, a piece of urban fabric that improves the immediate area while also stitching together the surrounding areas." Says Webber. "We think there are many useful ideas represented by the Living Building Challenge that can help us get there." Design teams are also encouraged to consider the usefulness of the site to both neighborhood residents and visitors.

SPREADING THE WORD:

The Chicago Collaborative's members knew this competition would greatly increase their responsibilities and workload, so they reached out into their community and asked for partners and meeting hosts. They soon found that Biomimicry Chicago was a perfect fit. "Because the mission of both Biomimicry Chicago and the Chicago Collaborative are so similar (forwarding innovative, restorative design for our region) and in order to maximize our impact on our local region, we had been looking for a project that we could collaborate on and this was a natural fit," says Amy Coffman Phillips, Co-Founder, Biomimicry Chicago.

Biomimicry Chicago stepped up to the plate and performed an AskPlace research project, which analyzed the original, pre-development site conditions and recommended restorative design strategies for the project site. The AskPlace project had three components: (re) connection with our native landscapes, (re)learning what makes them special, in order to (re)think how we design restoratively. Biomimicry Chicago began by looking at regional ecosystems and performing a "Genius of Place," or a comprehensive assessment of the abundances and constraints life has adapted to locally and then translated this information to the language of design. "By looking to our native ecosystems as a benchmark to measure the performance of our developments, we can begin to create buildings, infrastructure, and cities that perform as well if not better

than the ecosystems that they inhabit, or many times replace," says Coffman Phillips.

Biomimicry Chicago hosted and presented their findings to the design teams at the Collaborative's February charette in order to guide the teams' designs. Robin Randall, whose Judson University design course is participating in the competition, talks about the implication this had on her class. "I believe the application of AskPlace had an educational benefit as well as a design benefit. The students participating in the competition started the project thinking about orientation and solar and wind studies but had not "dug into" the site history and what they could learn from the previous inhabitants of the site. By assigning each student a native species to investigate and research, each created a relationship and became interested in approaching design from a new direction. Some even named their projects after the species or environment (web, burrow, cell). The fractals, water conservation strategies, adaption to wind and rain, and natural ventilation strategies have all played a role in transforming their designs."

In their quest to bring the first Living Building to Chicago, the Collaborative is exemplifying the spirit of community organizing. Margaret Mead spoke of this in her famous quote, "Never doubt that a small group of thoughtful, committed, citizens can change the world. Indeed, it is the only thing that ever has." Collaboratives like Chicago's are taking the sentiments of the Living Building Challenge and applying them to their local region to change the way we think and design. If you want to make a change in your community, consider joining or starting a Collaborative.

Stay tuned for the winner of the Near West Side competition will be announced on May 23rd and featured in the July edition of *Trim Tab* Magazine.

HILARY MAYHEW is the Living Building Challenge Community Coordinator

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